

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:


LISTING OF CLAIMS:

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1. (Currently Amended) A method of controlling power in a radio communication system having a radio interface between a first radio station and a second radio station, comprising:
receiving a transmission from the second radio station at the first radio station;
determining a transmission power correction instruction that corresponds to a ~~first~~ transmission power of the second radio station, the transmission power correction instruction ~~comprising~~ corresponding to a variable power adjustment increment, the variable power adjustment increment being adjustable ~~by the first radio station and the second radio station~~ in a subscriber-dependent manner and a time-dependent manner;
~~evaluating, over time, an interruption of transmission between the first radio station and the second radio station;~~
transmitting the transmission power correction instruction to the second radio station during a transmission of the first radio station; and
adjusting a ~~the second~~ transmission power of the second radio station according to the transmission power correction instruction;
wherein the variable power adjustment increment is temporarily increased after ~~the~~ an end of an interruption of transmission between the first radio station and the second radio station.

2. (Previously Presented) The method of claim 1, wherein an amount of increase of the variable power adjustment increment is based on a length of the interruption.

3. (Currently Amended) A method of controlling power in a radio communication system having a radio interface between a first radio station and a second radio station, comprising:

receiving transmissions of the second radio station at the first radio station;

 determining a transmission power correction instruction that corresponds to a ~~first~~ transmission power of the second radio station, the transmission power correction instruction ~~comprising~~ corresponding to a variable power adjustment increment;

evaluating, over time, a condition of transmission between the first radio station and the second radio station, the condition of transmission comprising a speed of movement of the first radio station or the second radio station;

transmitting the transmission power correction instruction to the second radio station during a transmission of the first radio station; and

adjusting ~~a second~~ the transmission power of the second radio station according to the transmission power correction instruction;

wherein the variable power adjustment increment is greater in a medium range of speed than in a high range of speed.

4. (Previously Presented) The method of claim 3, wherein the variable power adjustment increment is greater in a medium range of speed than in a low range of speed.

5. (Currently Amended) A method of controlling power in a radio communication system having a radio interface between a first radio station and a second radio station, comprising:

receiving transmissions of the second radio station at the first radio station;

determining a transmission power correction instruction that corresponds to a ~~first~~ transmission power of the second radio station, the transmission power correction instruction ~~comprising~~ corresponding to a variable power adjustment increment;

evaluating, over time, a condition of transmission between the first radio station and the second radio station, the condition of transmission comprising one or more of a number of transmitting antennas and a number of receiving antennas used to establish communication between the first radio station and the second radio station;

transmitting the transmission power correction instruction to the second radio station during a transmission of the first radio station; and

adjusting ~~a second~~ the transmission power of the second radio station according to the transmission power correction instruction;

wherein the variable power adjustment increment varies in accordance with at least one of the number of transmitting antennas and the number of receiving antennas.

6. (Previously Presented) The method of claim 5, wherein, in a case that transmitting is performed in accordance with a macro diversity method, the number of antennas used to establish the connection is changed by changing a number of base stations that are in contact with at least one of the first radio station and the second radio station.

7. (Previously Presented) The method of claim 6, wherein the variable power adjustment increment is increased in a case that the number of base stations that are in contact with at least one of the first radio station and the second radio station is increased.

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8. (Previously Presented) The method of claim 6, wherein the variable power adjustment increment is increased in a case that the number of base stations that are in contact with at least one of the first radio station and the second radio station is decreased.

Claims 9 to 14 (Cancelled)

15. (Currently Amended) A method of controlling power in a radio communication system having a radio interface between a first radio station and a second radio station, comprising:

receiving transmissions of the second radio station at the first radio station;

evaluating, over time, a condition of transmission between the first radio station and the second radio station,

detecting a change in the condition of transmission;

determining a transmission power correction instruction that corresponds to a transmission power of the second radio station, the transmission power correction instruction ~~comprising~~ corresponding to a variable power adjustment increment;

changing the variable power adjustment increment in response to a change in the condition of transmission;

transmitting the transmission power correction instruction to the second radio station during a transmission of the first radio station; and

adjusting the transmission power of the second radio station according to the transmission power correction instruction;

wherein detecting a change in the condition of transmission comprises detecting an interruption in the transmissions.

Claim 16 (Cancelled)

17. (Previously Presented) The method of claim 15, wherein detecting a change in the condition of transmission further comprises:

detecting a change in utilization of radio resources between an up-link and a down-link between the first radio station and the second radio station.

18. (Previously Presented) The method of claim 15, wherein detecting a change in the condition of transmission further comprises:

detecting a change to one or more of a number of transmitting antennas and a number of receiving antennas being used during transmission between the first and the second radio stations.

b 19. (Previously Presented) The method of claim 15, wherein a code division multiple access transmission protocol over a broadband transmission channel is used for transmission between the first radio station and the second radio station.

20. (Previously Presented) The method of claim 15, wherein the first radio station is a base station and the second radio station is a subscriber station.

21. (Previously Presented) The method of claim 15, wherein the first radio station is a subscriber station and the second radio station is a base station.

22. (Previously Presented) The method of claim 15, wherein detecting a change in the condition of transmission further comprises:

changing the power adjustment increment in accordance with one of a correspondence table and calculation rule linking different transmission conditions with different power adjustment increments.

23. (Currently Amended) A system for controlling a transmission power of a radio link, comprising:

a first radio station which receives a first transmission from a second radio station, which detects a change in a condition of transmission from the second radio station, and which evaluates a condition of the first transmission and determines a transmission power correction instruction, the transmission power correction instruction ~~including~~ corresponding to a variable increment of power adjustment, and which transmits the transmission power correction instruction to the second radio station from the first radio station; and

b a second radio station which receives the transmission power correction instruction of the first radio station, which transmits a second transmission from the second radio station to the first radio station, and which adjusts a transmission power during the second transmission;

wherein the first radio station detects the change in the condition of transmission comprises detecting an interruption in the transmissions.

Claim 24 (Cancelled)

25. (Currently Amended) The ~~method~~ system of claim 23, wherein the first radio station detects the change in the condition of transmission comprises detecting a change in utilization of radio resources between an up-link and a down-link between the first radio station and the second radio station.

26. (Currently Amended) The ~~method~~ system of claim 23, wherein the first radio station detects the change in the condition of transmission comprises detecting a change to one or more of a number of transmitting antennas and a number of receiving antennas being used during transmission between the first and the second radio stations.

27. (Currently Amended) The ~~method~~ system of claim 23, wherein a code division multiple access transmission protocol over a broadband transmission channel is used for transmission between the first radio station and the second radio station.

28. (Currently Amended) The ~~method~~ system of claim 23, wherein the first radio station comprises a base station and the second radio station comprises a subscriber station.

29. (Currently Amended) The ~~method~~ system of claim 23, wherein the first radio station comprises a subscriber station and the second radio station comprises a base station.

30. (Currently Amended) The ~~method~~ system of claim 23, wherein the first radio station changes the power adjustment increment in accordance with one of a correspondence table and calculation rule linking different transmission conditions with different power adjustment increments.

31. (New) A method of controlling power in a radio communication system having a radio interface between a first radio station and a second radio station comprising:

receiving transmissions of the second radio station at the first radio station;

evaluating, over time, a condition of transmission between the first radio station and the second radio station,

detecting a change in the condition of transmission;

determining a transmission power correction instruction that corresponds to a transmission power of the second radio station, the transmission power correction instruction corresponding to a variable power adjustment increment;

changing the power adjustment increment in response to a change in the condition of transmission;

transmitting the transmission power correction instruction to the second radio station during a transmission of the first radio station;

adjusting the transmission power of the second radio station according to the transmission power correction instruction;

wherein detecting a change in the condition of transmission comprises detecting a change to one or more of a number of transmitting antennas and a number of receiving antennas being used during transmission between the first and the second radio stations.

32. (New) A system for controlling a transmission power of a radio link, comprising:

a first radio station which receives a first transmission from a second radio station, which detects a change in a condition of transmission from the second radio station, and which evaluates a condition of the first transmission and determines a transmission power correction instruction, the transmission power correction instruction corresponding to a variable increment of power adjustment, and which transmits the transmission power correction instruction to the second radio station from the first radio station; and

a second radio station which receives the transmission power correction instruction of the first radio station, which transmits a second transmission from the second radio station to the first radio station, and which adjusts a transmission power during the second transmission;

b wherein the first radio station detects the change in the condition of transmission comprises detecting a change to one or more of a number of transmitting antennas and a number of receiving antennas being used during transmission between the first and the second radio stations.

33. (New) A method of controlling power in a radio communication system having a radio interface, comprising:

receiving a transmission from a second radio station at a first radio station;
determining a transmission power correction instruction that corresponds to a transmission power of the second radio station, the transmission power correction instruction corresponding to a variable power adjustment increment, the variable power adjustment increment being adjustable in a subscriber-dependent manner and a time-dependent manner; and

transmitting the transmission power correction instruction to the second radio station during a transmission of the first radio station;

wherein the variable power adjustment increment is temporarily increased after an end of an interruption of transmission between the first radio station and the second radio station.

34. (New) A method of controlling power in a radio communication system having a radio interface, comprising:

sending a transmission from a second radio station to a first radio station;

receiving a transmission power correction instruction at the second radio station during a transmission of the first radio station; and

b' adjusting the transmission power of the second radio station according to the transmission power correction instruction;

wherein the transmission power correction instruction corresponds to a transmission power of the second radio station, the transmission power correction instruction corresponds to a variable power adjustment increment, the variable power adjustment increment being adjustable in a subscriber-dependent manner and a time-dependent manner; the variable power adjustment increment is temporarily increased after an end of an interruption of transmission between the first radio station and the second radio station.

35. (New) A method of controlling power in a radio communication system having a radio interface, comprising:

receiving transmissions of a second radio station at a first radio station;

determining a transmission power correction instruction that corresponds to a transmission power of the second radio station, the transmission power correction instruction corresponding to a variable power adjustment increment;

evaluating, over time, a condition of transmission between the first radio station and the second radio station, the condition of transmission comprising one or more of a number of transmitting antennas and a number of receiving antennas used to establish communication between the first radio station and the second radio station;

b¹ transmitting the transmission power correction instruction to the second radio station during a transmission of the first radio station; and

adjusting the transmission power of the second radio station according to the transmission power correction instruction;

wherein the variable power adjustment increment varies in accordance with at least one of the number of transmitting antennas and the number of receiving antennas.

36. (New) A method of controlling power in a radio communication system having a radio interface, comprising:

sending transmissions from a second radio station to a first radio station;

evaluating, over time, a condition of transmission between the first radio station and the second radio station, the condition of transmission comprising one or more of a number of

transmitting antennas and a number of receiving antennas used to establish communication between the first radio station and the second radio station;

receiving the transmission power correction instruction at the second radio station during a transmission of the first radio station; and

adjusting the transmission power of the second radio station according to the transmission power correction instruction;

10 wherein the transmission power correction instruction corresponds to a transmission power of the second radio station, the transmission power correction instruction corresponds to a variable power adjustment increment, the variable power adjustment increment varies in accordance with at least one of the number of transmitting antennas and the number of receiving antennas.
